

27. (Amended) A composition which comprises a transparent non-porous or translucent non-porous system further comprising a double-stranded oligonucleotide or polynucleotide which is directly or indirectly fixed or immobilized to a solid support wherein one of the strands comprises a chemical label that further comprises a signalling moiety which [will generate] is capable of generating a soluble signal.

46. (Amended) An apparatus comprising:

- 1) a solution containing means comprising a transparent non-porous or translucent non-porous device; and
- 2) means for forming a fixed or immobilized double-stranded oligonucleotide or polynucleotide hybrid to a solid support, said hybrid comprising a chemical label attached to one strand of said hybrid, said label further comprising a signalling moiety which will generate a soluble signal; and
- 3) a soluble signal generating means.

47. (Amended) A kit for generating a soluble signal from a chemically labeled double-stranded oligonucleotide or polynucleotide, comprising in one or more containers:

- (i) a first single-stranded oligonucleotide or polynucleotide strand [or] containing a sequence having attached thereto a chemical label that further comprises a signalling moiety which [will generate] is capable of generating a soluble signal, said sequence being partially homologous or hybridizable to a sequence contained in a nucleic acid of interest, and said [sequence] strand being directly or indirectly fixed or immobilized to a solid support;
- (ii) a second single-stranded oligonucleotide or polynucleotide containing a sequence which is homologous to a different sequence contained in said sample nucleic acid than said first sequence in (i);
- (iii) a solution for generating a soluble signal; and
- (iv) buffers and instructions therefor.

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